

IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

1. (Currently Amended) A print apparatus which forms a color image by applying ink materials of plural colors onto a print medium, using a recording means including a plurality of nozzle arrays arranged along a predetermined direction, ~~said~~ the nozzle array having a plurality of nozzles to eject ink materials, said apparatus comprising:

a scanner to scan the recording means in forward scanning and backward scanning directions, wherein said scanner scans along ~~said~~ the predetermined direction; and

a print controller to control the printing so that a printing means executes the printing while said scanner scans ~~said~~ the recording means in the forward scanning and the backward scanning directions[~~[,]~~]; and

a changing means to change an order of application of the plural ink materials of different colors to a pixel area,

wherein said print controller applies plural ink materials for each pixel area, ~~said~~ the pixel area serving as a unit area to form a primary or secondary color thereon,

~~wherein at plural positions on a pixel area for forming the secondary color thereon, said print controller forms dots of the secondary color, in ink materials of plural colors for forming the secondary color, and~~

~~wherein said ink materials of plural colors are applied so that an~~

~~application order of said ink material of predetermined color and said ink material of second color, of said dots of the secondary color to be formed at plural positions on said pixel area, is symmetric, said predetermined color and said second color being for forming the secondary color~~

wherein said print controller applies plural ink materials of different colors for forming the secondary color, to each of plural positions on the pixel area, and

wherein said changing means can change orders of application of the plural ink materials of different colors, to the respective positions on one pixel area.

2. (Currently Amended) The print apparatus according to Claim 1, wherein ~~said~~ the plural ink materials of different ~~the second colors for forming the secondary color are~~ [[is]] applied plural times onto said the pixel area.

3. (Currently Amended) The print apparatus according to Claim 1, wherein dots of the ink materials of the plural colors applied onto ~~said the~~ the pixel area have centers of gravity all substantially matching each other.

4. (Currently Amended) The print apparatus according to Claim 1, wherein dots of the ink materials of the plural colors applied onto ~~said the~~ the pixel area overlap at least in part.

5. (Currently Amended) The print apparatus according to Claim 2, wherein a plurality of dots of the secondary color are laid in different application orders of

the ink material of a certain color and the ink material of ~~said~~ the second color in ~~said~~ the pixel area.

6. (Currently Amended) The print apparatus according to Claim 1, wherein ~~said~~ the recording means comprises a plurality of recording elements arranged in such a manner that recording elements for applying the ink material of a certain color are symmetric in a scanning direction with respect to recording element for applying the ink material of ~~said~~ the second color.

7. (Currently Amended) The print apparatus according to Claim 6, wherein ~~said~~ the recording means comprises recording elements for applying at least ink materials of cyan, magenta, and yellow, wherein, with respect to a recording element corresponding to the certain color, the recording elements corresponding to the other colors are located in symmetry in the scanning direction.

8. (Currently Amended) The print apparatus according to Claim 6, wherein ~~said~~ the recording means comprises two sets of recording elements for applying at least ink materials of cyan, magenta, and yellow arranged in symmetry in the scanning direction.

9. (Currently Amended) The print apparatus according to Claim 7, wherein ~~said~~ the recording means further comprises a recording element for applying black ink.

10. (Currently Amended) The print apparatus according to Claim 8, wherein ~~said~~ the recording means further comprises a recording element for applying black ink.

11. (Currently Amended) The print apparatus according to Claim 6, wherein the ink materials of the plural colors applied to ~~said~~ the pixel area are applied by one scan of ~~said~~ the recording means.

12. (Currently Amended) The print apparatus according to Claim 1, wherein the ink materials of the plural colors applied to ~~said~~ the pixel area are applied by plural scans in forward and backward scanning directions of ~~said~~ the recording means.

13. (Currently Amended) The print apparatus according to Claim 1, further comprising a memory for storing data for selectively applying the ink materials of ~~said~~ the plural colors onto the print medium in accordance with the color image and for storing data for enabling the ink material of a certain color to be applied plural times onto ~~said~~ the pixel area.

14. (Previously Presented) The print apparatus according to Claim 13, wherein said memory is a print buffer.

15. (Currently Amended) The print apparatus according to Claim 7, comprising a memory for storing data for selectively applying the ink materials of ~~said~~ the

plural colors onto the print medium in accordance with the color image, in correspondence to each of ~~said~~ the plurality of recording elements.

16. ~~(Currently Amended)~~ The print apparatus according to any one of Claims 1 to 15, wherein ~~said~~ the recording means ejects the ink materials by heat.

17. (Currently Amended) A print apparatus which forms a color image by applying ink materials of plural colors onto a print medium using a recording means including a plurality of nozzle arrays arranged along a predetermined direction, ~~said~~ the nozzle array having a plurality of nozzles to eject ink materials, said apparatus comprising:

a scanner to scan the recording means in forward scanning and backward scanning directions, wherein said scanner scans along the predetermined direction; and

a print controller to control the printing by applying plural ink materials for each pixel area, ~~said~~ the pixel area serving as a unit area to form a color thereon,

~~wherein on a pixel area for forming thereon a process color being represented in ink materials of plural colors, said print controller forms a plurality of dots of the process color, in printing during one scan of said recording means by said scanner;~~
and

~~wherein an application order of the ink materials of plural colors for forming the process color may be symmetric~~

wherein, orders of application of the plural ink materials of different colors for forming the process color, to the respective positions on one pixel area, are made symmetric.

18. (Previously Presented) The print apparatus according to Claim 1, said apparatus being applied to a copy machine having a scanner.

19. (Previously Presented) The print apparatus according to Claim 1, said apparatus being applied to a facsimile machine having a transmitter and receiver of data.

20. (Currently Amended) A print method which forms a color image by applying ink materials of plural colors onto a print medium using a recording means including a plurality of nozzle arrays arranged along a predetermined direction, the nozzle array having a plurality of nozzles to eject ink materials, said method comprising the following steps:

scanning the recording means in forward scanning and backward scanning directions, wherein the scanning is performed along the predetermined direction;

controlling the printing so that a printing means executes the printing while ~~the~~ said scanning step ~~scans is performed to scan~~ the recording means in the forward scanning and the backward scanning directions,

wherein, in said printing controlling step, the printing means controller applies plural ink materials for each pixel area, the pixel area serving as a unit area to form a primary or secondary color thereon,

~~wherein at plural positions on a pixel area for forming the secondary color thereon, in said printing control step, the print controller forms dots of the secondary color, in ink materials of plural colors for forming the secondary color, and~~

~~wherein the ink materials of plural colors are applied so that an application order of the ink material of predetermined color and the ink material of second color, of the dots of the secondary color to be formed at plural positions on the pixel area, is symmetric, the predetermined color and the second color being for forming the secondary color~~

wherein the printing on the print medium is executed by changing an order of application of the plural ink materials of different colors to the pixel area, and

wherein, when the plural ink materials of different colors for forming the secondary color are applied to each of the plural positions on the pixel area so as to print the secondary color, the orders of application of the plural ink materials of different colors to the respective positions on one pixel area, can be changed.

21. (Previously Presented) The print method according to Claim 20, wherein the recording means comprises two sets of recording elements for applying the ink material of a certain color, which are arranged in symmetry in a scanning direction with respect to a recording element for applying the ink material of a second color, and

wherein a first step and a second step are carried out by one scan of the recording means.

22. (Currently Amended) A print method which forms a color image by applying ink materials of plural colors onto a print medium using a recording means

including a plurality of nozzle arrays arranged along a predetermined direction, the nozzle array having a plurality of nozzles to eject ink materials, said method comprising the following steps:

~~scanning the recording means in forward scanning and backward scanning directions, wherein the scanning is performed along the predetermined direction;~~
and

controlling the printing by applying plural ink materials for each pixel area, the pixel area serving as a unit area to form a color thereon,

~~wherein on a pixel area for forming thereon a process color being represented in ink materials of plural colors, in said printing control step, the print controller forms a plurality of dots of the process color, in printing during one scan of the recording means by the scanner, and~~

~~wherein an application order of the ink materials of plural colors for forming the process color is symmetric~~

wherein orders of application of the plural ink materials of different colors for forming the process color, to the respective positions on one pixel area, are made symmetric.

23. (Currently Amended) The print method according to Claim 22, wherein the recording means comprises two sets of recording elements for applying the ink material of a certain color and recording elements for applying the ink material of a second color arranged in symmetry in the scanning direction, and wherein said scanning step is performed by using the recording means.

24. (Currently Amended) The print method according to Claim 23, wherein said scanning step is performed by using a plurality of scans in forward and backward scanning directions of the recording means.

25. (Currently Amended) A print apparatus which forms a color image by applying ink materials of plural colors onto a print medium, using a recording means including a plurality of nozzle arrays arranged along a predetermined direction, the nozzle array having a plurality of nozzles to eject ink materials, said apparatus comprising:

a scanner to scan the recording means in forward scanning and backward scanning directions, wherein said scanner scans along ~~said~~ the predetermined direction;

a print controller to control the printing so that a printing means executes the printing while said scanner scans ~~said~~ the recording means in the forward scanning and the backward scanning directions[~~[[,]]~~];

a changing means to change an order to application of the plural ink materials of different colors to the pixel area,

wherein said print controller applies plural ink materials for each pixel area, ~~said~~ the pixel area serving as a unit area to form a primary or secondary color thereon,

~~wherein at plural positions on a pixel area for forming the secondary color thereon, said print controller forms dots of the secondary color, in ink materials of plural colors for forming the secondary color,~~

~~wherein said ink materials of plural colors are applied so that an application order of said ink material of predetermined color and said ink material of a~~

~~second color, of said dots of the secondary color to be formed at plural positions on said pixel area, is symmetric, said predetermined color and the second color being for forming the secondary color, and~~

~~wherein said print controller applies plural ink materials of different colors for forming the secondary color, to each of plural positions on the pixel area,~~

~~wherein said changing means can change orders of application of the plural ink materials of different colors, to the respective positions on one pixel area; and~~

~~a data buffer configuration to configure image data to be printed by said the plurality of nozzles.~~

26. (Currently Amended) A data buffer configuration of a print apparatus, said configuration comprising image data of a certain color written into a plurality of print buffers by a print controller, wherein the print controller controls a printing of an image by means of a plurality of nozzles,

wherein said the printing is executed by applying plural ink materials for each pixel area to form a primary or secondary color thereon, said the pixel area being a unit area,

wherein, as to the pixel area forming the secondary color thereon, dots of the secondary color are formed, in ink materials of plural colors, at plural positions on the pixel area to form the secondary color.

27. (Previously Presented) The data buffer configuration according to Claim 26, wherein the same data may be written into two print buffers.